

TAS 3562A

T.H. 55

HAMEL TO BUFFALO

S.P. 8606, 8607, 2722

MARCH 1967

OFFICE OF
TRANSPORTATION SYSTEM PLANNING

MINNESOTA HIGHWAY DEPARTMENT

DEPARTMENT HIGHWAY

STATE OF MINNESOTA

Office Memorandum

TO : Paul G. Velz
Road Design Engineer

DATE: March 14, 1967

FROM : Robert D. Owens, Chief
Traffic Analysis Section

SUBJECT: T.H. 55, S.P. 2722, 8606, 8607,
Hamel to Buffalo

The Traffic Analysis Section transmits this report in response to your February 15, 1967, request for the 1990 ADT, DHV, and HCA DT for the project location as shown on the map on page 2.

For each segment numbered on the map on page 3, the Section tabulated the data on pages 4-7.

- a) Total ADT
- b) Vehicle Type Distribution
- c) Total Heavy Commercial ADT
- d) Total DHV Without Directional Distribution
- e) Directional Distribution of DHV

Segment 41 has the highest 1990 ADT. This segment has a 1966 ADT of 6050.

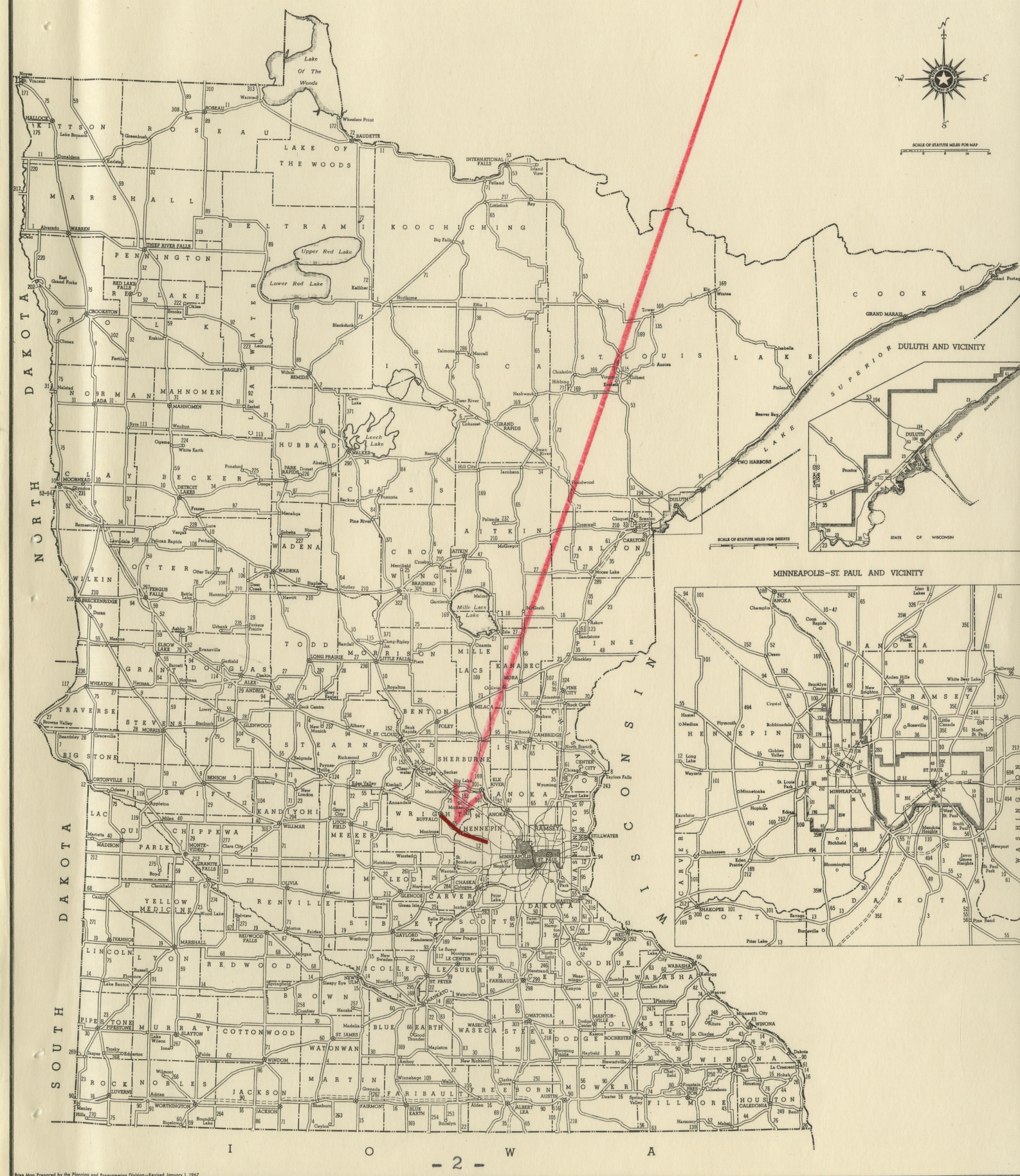
The basic data, method and assumptions are on page 8.

C. P. Kachelmyer requested this report.

Robert D. Owens

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

Project Location
S.P. 8606, 8607, 2722



TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 1 OF 4

FOR

T.H. 55 S.P. 8606, 8607, 2722 LENGTH - MILESCOUNTY Wright, Hennepin LOCATION Hamel to Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	4422	3270	3789	4551	4394	1445	6014	5723	6094	6358	6746
1	260	175	190	267	259	28	290	285	290	293	300
2	89	46	50	91	88	11	100	98	100	102	104
3	24	5	5	24	24	1	25	25	25	25	25
4	38	10	10	38	38	2	40	40	40	40	40
5	111	25	25	112	111	5	116	115	116	116	117
6	56	19	21	57	56	8	65	64	65	66	68
TOTAL ADT	5000	3550	4090	5140	4970	1500	6650	6350	6730	7000	7400
TOTAL H. COMM. ADT	578	280	301	589	576	55	636	627	636	642	654
TOTAL DHV	724	501	577	734	704	75	720	670	670	680	690
DIRECTIONAL DISTRIBUTION	65-35	55-45	55-45	65-35	65-35	55-45	65-35	65-35	65-35	65-35	65-35

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 2 OF 4

FOR

T.H. 55 S.P. 8606, 8607, 2722 LENGTH - MILESCOUNTY Wright, Hennepin LOCATION Hamel to Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	5884	7242	1697	2451	5356	5356	3204	193	385	8404	1926
1	212	237	50	72	181	181	96	3	7	194	36
2	74	81	27	39	51	51	51	2	4	103	19
3	24	24	2	3	22	22	4	-	-	7	2
4	38	38	3	5	35	35	6	-	-	11	3
5	113	117	12	17	104	104	22	1	2	44	8
6	55	61	9	13	51	51	17	1	2	37	6
TOTAL ADT	6400	7800	1800	2600	5800	5800	3400	200	400	8800	2000
TOTAL H. COMM. ADT	516	558	103	149	444	444	196	7	15	396	74
TOTAL DHV	590	730	145	225	575	575	350	20	40	910	210
DIRECTIONAL DISTRIBUTION	65-35	65-35	55-45	55-45	70-30	70-30	65-35	65-35	65-35	65-35	65-35

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 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 3 OF 4

FOR

T.H. 55 S.P. 8606, 8607, 2722 LENGTH - MILESCOUNTY Wright, Hennepin LOCATION Hamel to Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER											
	23	24	25	26	27	28	29	30	31	32	33	
0	6934	13638	976	1757	14809	16363	17917	18888	2468	380	949	
1	130	337	12	21	352	373	394	407	65	10	25	
2	69	133	6	10	140	149	158	164	34	5	13	
3	5	29	-	-	29	31	33	34	3	-	1	
4	8	46	1	2	47	50	53	55	4	1	2	
5	29	138	3	6	142	148	154	158	14	2	6	
6	25	79	2	4	81	86	91	94	12	2	4	
TOTAL ADT	7200	14400	1000	1800	15600	17200	18800	19800	2600	400	1000	
TOTAL H. COMM. ADT	266	762	24	43	791	837	883	912	132	20	51	
TOTAL DHV	750	1485	85	180	1610	1775	1945	2055	260	40	100	
DIRECTIONAL DISTRIBUTION	65-35	70-30	55-45	55-45	70-30	65-35	65-35	65-35	55-45	60-40	60-40	

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 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
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 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 4 OF 4

FOR

T.H. 55 S.P. 8606, 8607, 2722 LENGTH - MILESCOUNTY Wright, Hennepin LOCATION Hamel to Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 41 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER											
	34	35	36	37	38	39	40	41				
0	759	2278	4176	20976	195	3310	3115	23896				
1	20	60	110	462	3	45	42	501				
2	11	32	59	193	1	24	23	215				
3	1	2	5	36	-	2	2	38				
4	1	4	6	59	-	2	2	61				
5	4	13	23	171	1	9	8	178				
6	4	11	21	103	-	8	8	111				
TOTAL ADT	800	2400	4400	22000	200	3400	3200	25000				
TOTAL H. COMM. ADT	41	122	224	1024	5	90	85	1104				
TOTAL DHV	80	225	425	2260	15	295	280	2525				
DIRECTIONAL DISTRIBUTION	60-40	60-40	55-45	65-35	65-35	65-35	65-35	65-35				

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Basic Data, Method, and Assumptions

It is assumed that T.H. 55 will be upgraded to a 4-lane divided highway from Hamel to Buffalo from its present 2-lane structure. Basic data for the 1990 ADT from Buffalo to Crow River are:

- 1) 1953, 1958, and 1963 Wright County coverage counts.
- 2) Past 17-years' least squares trends
- 3) Aerial photos of Buffalo and Rockford
- 4) Population from 1930, 1940, 1950, and 1960 U.S. Bureau of Census data for Buffalo and Rockford.

The traffic from the Crow River bridge to east of T.H. 101 is that of System "10" Computer ADT.

The DHV for T.H. 55 Southeast of the Crow River is from the System "10" Computer assignment. For T.H. 55 from the Crow River to Buffalo, the DHV computation was based on the hourly records of a continuously operated traffic counting machine applied to the hourly traffic recorded for T.H. 55 east of Buffalo.

The HCADT for the project reflects diversion by vehicle type to a completed T.H. 94. The HCADT from the Crow River bridge east is based on the System "10" Computer truck study.